AMENDMENTS TO THE CLAIMS

This following listing of the claims replaces all prior versions and listings of claims for this application. Within this listing of the claims, claims 1, 14, 15, 71, 72, 76, and 79 are amended. Deletions in claim language are indicated with strikethroughs and additions are underlined in bold.

1. **(Currently amended)** A separation method comprising the steps of:

(a) detecting, in a fluid having a surface and containing a plurality of localized **fluid** volumes having a different acoustic impedance than the fluid, a single localized volume located sufficiently near the surface for ejection;

(b) determining whether the single localized volume possesses one or more properties;

(c) selecting the single localized volume for ejection from the fluid based on the determination of one or more properties in step (b); and

(d) ejecting the single localized volume from the fluid **towards a suitable substrate material** by use of focused radiation.

2. **(Previously presented)** The method of claim 1, wherein the focused radiation is focused acoustic radiation.

3. **(Previously presented)** The method of claim 1, wherein the focused radiation is focused electromagnetic radiation.

4. **(Original)** The method of claim 1, wherein the localized volume comprises a solid or gel particle.

5. **(Original)** The method of claim 1, wherein the localized volume comprises a cell.

6. **(Original)** The method of claim 5, wherein the localized volume comprises a living cell.

7. **(Original)** The method of claim 1, wherein the localized volume is ejected in a trajectory substantially perpendicular to the fluid surface.

8. **(Previously presented)** The method of claim 1, wherein the localized volume is ejected with a first non-zero velocity component perpendicular to the fluid surface and a second non-zero velocity

component parallel to the fluid surface to effect a nonvertical trajectory whereby the localized volume experiences a net displacement in a direction parallel to the fluid surface.

9. **(Previously presented)** The method of claim 8, wherein the nonvertical trajectory is directionally controllable.

10. **(Original)** The method of claim 8, wherein the non-vertical distance of travel parallel to the fluid surface is controllable by varying the focused energy.

11. **(Original)** The method of claim 8, wherein the vertical distance of travel parallel to the fluid surface is controllable by varying the focused energy.

12. **(Previously presented)** The method of claim 1, wherein the determining in step (b) of the one or more properties is a quantitative or semiquantitative determination.

13. **(Previously presented)** The method of claim 12, wherein the fluid is contained in a fluidic channel on a substrate surface.

14. **(Currently amended)** The method of claim 13, wherein ~~data from steps (a) and (b) is input into a processor that directs said selecting of (c) and said ejecting of (d) by reference to the data~~ **the acoustic impedances of step 1(a) and the properties of step (b) are inputted into a processor as individual parameters and further wherein upon selection of an acoustic impedance and one or more properties as inputted in the processor, the selection and ejection of the localized volume of steps (c) and (d), respectively, is carried out according to the inputted parameters**.

15. **(Currently amended)** The method of claim 1, wherein the localized volumes are circumscribed **fluid** volumes.

16-66. **(Canceled)**.

67. **(Previously presented)** The method of claim 13, wherein the fluidic channel has a cross section permitting the localized volume to flow freely through the channel.

68. **(Previously presented)** The method of claim 67, wherein the cross section is sufficiently narrow such that if two or more of the localized volumes are present in the channel, they necessarily form a linear flow path of single localized volumes successively passing any given point in the channel.

69. **(Previously presented)** The method of claim 1, wherein the fluid is contained in two or more fluidic channels on a substrate surface.

70. **(Previously presented)** The method of claim 1, wherein steps (a) through (d) are repeated so as to eject a plurality of single localized volumes from the fluid.

71. **(Currently amended)** The method of claim 15, wherein ~~each circumscribed volumes comprises a cell are comprised of cells~~ **the circumscribed volumes are comprised of cells such that a single individual cell comprises a single circumscribed volume**.

72. **(Currently amended)** The method of claim 71, wherein ~~each cell is a living cell~~ **the cells are living cells**.

73. **(Previously presented)** The method of claim 72, wherein steps (a) through (d) are repeated so as to selectively eject a plurality of living cells from the fluid.

74. **(Previously presented)** The method of claim 72, wherein the fluid is contained in a fluidic channel on a substrate surface.

75. **(Previously presented)** The method of claim 74, wherein the fluidic channel has a cross section permitting each cell to flow freely through the channel.

76. **(Currently amended)** The method of claim 75, wherein the cross section is sufficiently narrow such that if two or more cells are present in the channel, they necessarily form a linear flow path of single ~~single~~ cells successively passing any given point in the channel.

77. **(Previously presented)** The method of claim 67, wherein the fluid is contained in two or more fluidic channels on a substrate surface.

78. **(Previously presented)** The method of claim 73, wherein each cell is ejected toward and deposited on a different target site on a substrate surface.

79. **(Currently amended)** The method of claim 78, wherein the target site at which each cell is deposited is selected based on the determination **of the one or more properties** in step (b).

80. **(Previously presented)** The method of claim 73, wherein each cell is ejected toward and deposited into a target container.

81. **(Previously presented)** The method of claim 80, wherein cells having a first property as determined in step (b) are deposited into a first target container, and cells having a second property as determined in step (b) are deposited into a second target container.

82. **(Previously presented)** The method of claim 81, wherein additional cells having a particular property as determined in step (b) are deposited into an additional target container.

83. **(Previously presented)** The method of claim 80, wherein the target container is a well in a well plate.

84. **(Previously presented)** The method of claim 82, wherein the target containers are individual wells in a single well plate.

85. **(Previously presented)** The method of claim 80, wherein the target container is a fluidic channel in a substrate surface.

86. **(Previously presented)** The method of claim 82, wherein the target containers are individual fluidic channels in a substrate surface.

87. **(Previously presented)** The method of claim 2, wherein the acoustic radiation is delivered to the localized volume at a geometric center of the volume.

88. **(Previously presented)** The method of claim 87, wherein the geometric center of the volume is located approximately 50 to 150 μm beneath the fluid surface.